

WHAT IS CLAIMED IS:

1. A tip cap for sealingly covering the distal end of a syringe comprising:

5 a cylindrical housing having a bottom portion comprising an inner end wall and an outer end wall, a top portion comprising a rim and an annular skirt extending from said top portion to said bottom portion having an inner surface and an outer surface and means for venting air from said syringe and for providing tactile means to the user that said syringe has been vented by said tip cap.

- 10 2. The tip cap of Claim 1, wherein said means for venting is an inner plug that projects proximally from said inner end wall of said bottom portion.

3. The tip cap of Claim 2, further comprising an intermediate wall projecting proximally from said inner end wall of said bottom portion and spaced in surrounding relationship to said plug.

4. The tip cap of Claim 3, wherein said intermediate wall comprises an outer surface that is substantially cylindrical and an inner surface that is defined by intersecting planar surfaces.

5. The tip cap of Claim 4, wherein said inner surface of said intermediate wall is substantially a hexagonal cross-section.

- 25 6. The tip cap of Claim 5, wherein said outer surface of said intermediate wall comprises vertical interference strips.

7. The tip cap of Claim 6, wherein said interference strips comprise a first position to indicate a first venting position to the user and a second position to indicate to the user that said tip cap and said syringe are removably secure.

8. The tip cap of Claim 7, further comprising a generally cylindrical internal sealing ring extending from said inner surface of said annular skirt and said inner end wall of said bottom portion.

9. The tip cap of Claim 8, wherein said internal sealing ring comprises an inner wall surface and an outer wall surface.

10. The tip cap of Claim 9, wherein said internal sealing ring is separated from said outer surface of said intermediate wall by a first annular space.

11. The tip cap of Claim 10, further comprising a second annular space between said inner surface of said annular skirt and said inner wall surface of said internal sealing ring.

12. The tip cap of Claim 11, further comprising indentations on said inner wall surface of said internal sealing ring.

13. A syringe assembly comprising:

a syringe comprising a barrel, a syringe tip, a luer connection, a needle and a plunger rod with a piston member on the distal end of said plunger rod; and

a tip cap over said distal end of said syringe barrel comprising a cylindrical housing having a bottom portion comprising an inner end wall and an outer end wall, a top portion comprising a rim and an annular skirt extending from said top

portion to said bottom portion having an inner surface and an outer surface and means for venting air from said syringe and for providing tactile means to the user that said syringe has been vented by said tip cap.

14. The assembly of Claim 13, wherein said means for venting is an inner plug that projects proximally from said inner end wall of said bottom portion.
15. The assembly of Claim 14, further comprising an intermediate wall projecting proximally from said inner end wall of said bottom portion and spaced in surrounding relationship to said plug.
16. The assembly of Claim 15, wherein said intermediate wall comprises an outer surface that is substantially cylindrical and an inner surface that is defined by intersecting planar surfaces.
17. The assembly of Claim 16, wherein said inner surface of said intermediate wall is substantially a hexagonal cross-section.
18. The assembly of Claim 17, wherein said outer surface of said intermediate wall comprises vertical interference strips.
19. The assembly of Claim 18, wherein said interference strips comprise a first position to indicate a first venting position to the user and a second position to indicate to the user that said tip cap and said syringe are removably secure.
20. The assembly of Claim 19, further comprising a generally cylindrical internal sealing ring extending from said inner surface of said annular skirt and said inner end wall of said bottom portion.

21. The assembly of Claim 20, wherein said internal sealing ring comprises an inner wall surface and an outer wall surface.

22. The assembly of Claim 21, wherein said internal sealing ring is separated from
5 said outer surface of said intermediate wall by a first annular space.

23. The assembly of Claim 22, further comprising a second annular space between
said inner surface of said annular skirt and said inner wall surface of said internal
sealing ring.

10 24. The assembly of Claim 23, further comprising indentations on said inner wall
surface of said internal sealing ring.

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